

## What is Claimed:

- 1           1.     A heat sink configured to support an edge of a circuit card,  
2     said heat sink comprising:  
  
3           a thermally conductive base;  
  
4           a plurality of thermally conductive heat dissipating fins extending  
5     from said base; and  
  
6           one or more recesses at least partially defined by at least one of  
7     said fins or by said base, said one or more recesses being configured to  
8     support the edge of the circuit card.
- 1           2.     The heat sink of claim 1 wherein said base and said fins are  
2     formed by extrusion.
- 1           3.     The heat sink of claim 1 wherein said one or more recesses  
2     are further configured to support the edge of the circuit card in sliding  
3     association with said heat sink.
- 1           4.     The heat sink of claim 3 wherein said recess is a slot  
2     configured to guide the edge of the circuit card during sliding movement of  
3     the circuit card.
- 1           5.     The heat sink of claim 1 further comprising a face disposed  
2     opposite said fins, said base being configured to be mounted with said  
3     face abutting a heat-generating component.
- 1           6.     The heat sink of claim 1 wherein said recess is defined by  
2     said base.
- 1           7.     The heat sink of claim 1 wherein said recess is defined by one  
2     or more of said fins.

1           8.     The heat sink of claim 1 wherein said recess has a depth  
2 smaller than the length of said fins.

1           9.     The heat sink of claim 1 wherein said fins are oriented  
2 substantially parallel to one another.

1           10.    A method for supporting a circuit card in a computer system,  
2 said method comprising the steps of:

3                affixing in a computer system a heat sink having a recess  
4 configured to receive an edge of a circuit card;

5                orienting the heat sink to position the recess to receive an edge of a  
6 circuit card; and

7                positioning the edge of the circuit card in the recess.

1           11.    The method of claim 10, wherein said positioning step  
2 comprises sliding the circuit card in the recess.

1           12.    The method of claim 10, wherein said affixing step comprises  
2 affixing the heat sink to a heat-generating component.

1           13.    The method of claim 12 wherein the heat-generating  
2 component is mounted on a circuit board, and said affixing step comprises  
3 affixing the heat sink with the recess disposed opposite the heat-  
4 generating component.

1           14.    The method of claim 10, wherein the circuit card carries at  
2 least one heat generating component, and said positioning step comprises  
3 thermally coupling the heat-generating component to the heat sink when  
4 the circuit card is positioned in the recess.

1           15.    A circuit board assembly comprising:  
2           a circuit board;  
3           a heat generating component mounted on said circuit board; and  
4           a heat sink thermally coupled to said heat generating component  
5           and having a plurality of fins for dissipating heat, said heat sink defining a  
6           recess for supporting and guiding an edge of a circuit card.

1           16.    The circuit board assembly of claim 15 wherein said circuit  
2           card comprises an edge portion in sliding association with said recess.

1           17.    The circuit board assembly of claim 15 further comprising a  
2           connector configured for electrically coupling said circuit card to a  
3           computer system, said recess of said heat sink being oriented to guide  
4           said circuit card for coupling said connector to said computer system.

1           18.    A heat sink guiding one or more circuit cards and transferring  
2           heat from one or more heat-generating components, said heat sink  
3           comprising:

4           a surface defining one or more slots configured to guide an edge of  
5           a circuit card; and

6           heat dissipating fins thermally coupled to said surface,

7           said heat sink being configured to provide a thermal path from a  
8           heat-generating component to said fins via said surface.

1           19.    The heat sink of claim 18 further comprising a surface  
2           disposed opposite said slots and configured to be mounted in thermal  
3           contact with said one or more heat-generating components.

1           20.    The heat sink of claim 18 having a substantially constant  
2           cross-sectional shape.

1           21.    A method for guiding a circuit board in a computer system,  
2    said method comprising:

3           positioning an edge portion of the circuit board in a recess defined  
4    by a heat sink of the computer system, thereby guiding the circuit board.